## PrAMC based on Intel Xeon E3-1125, Dual 10 GbE – AMC721

**PrAMC, Dual 10 GbE**



## KEY FEATURES

- Single module, mid-size (option for full-size) per AMC.0
- Processor AMC with Intel® Xeon™ with an 8900 Series PCH
- 10 GbE on ports 4-7 and 8-11 (AMC.2)
- GbE to ports 0 and 1 (AMC.2)
- SATA to ports 2 and 3 (AMC.3)
- Dual GbE to the front panel
- Up to 16 GB of DDR3 memory with ECC
- Option for up to 32 GB Flash
- Serial over LAN
- IPMI 2.0 compliant
- RoHS compliant



### Benefits of Choosing VadaTech

- High performance processor with various chipset options
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The AMC721 is a Processor AMC (PrAMC) in a single module, mid-size AdvancedMC™ (AMC) form factor based on the Intel® Xeon™ Processor with an 8900 Series PCH.

The module follows the AMC.2 and the AMC.3 specifications. The module provides dual 10 GbE on ports 4-11 per AMC.2, dual GbE on ports 0 and 1 per AMC.2, and SATA on ports 2 and 3 per AMC.3. It also provides dual GbE to the front.

The AMC721 has option for up to 16 GB of DDR3 memory with ECC. Further the AMC721 provides 32 GB of Flash for the OS. The AMC721 has serial over LAN with hardware Random Number Generator (RNG) as seed generator for authentication.

The BIOS allows booting from on board Flash, off board SATA, PXE boot as well as USB.

Linux OS is standard on the AMC721, consult VadaTech for other options.

## INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and µTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.
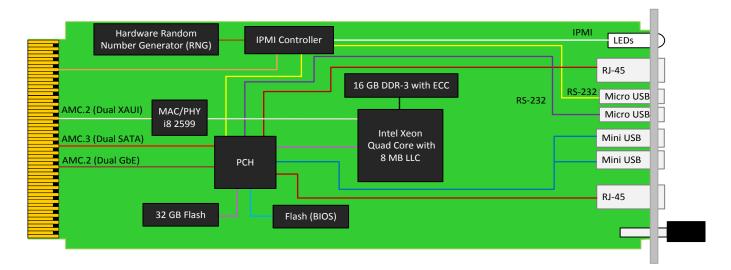
## BLOCK DIAGRAM
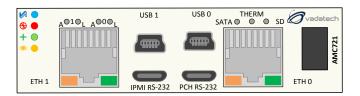


Figure 1: AMC721 Functional Block Diagram

## FRONT PANEL



Figure 2: AMC721 Front Panel

## SPECIFICATIONS

| Architecture | | |
|---|---|---|
| **Physical** | Dimensions | Single module, mid-size (full-size optional) |
| | | Width: 2.89" (73.5 mm) |
| | | Depth 7.11" (180.6 mm) |
| **Type** | AMC Processor | Intel® Xeon™ with up to four core at 2.0 GHz and 8 MB LLC |

| Standards | | |
|---|---|---|
| **AMC** | Type | AMC.0, AMC.2 and/or AMC.3 |
| **Module Management** | IPMI | IPMI version 2.0 |
| **XAUI** | Lanes | Dual XAUI on ports 4-11 |

| Configuration | | |
|---|---|---|
| **Power** | AMC721 | 18W to 58W (CPU dependant) |
| **Environmental** | Temperature | Operating temperature: -5° to 55° C (air flow requirement of >600 LFM), industrial and military versions also available (See environmental spec sheet) |
| | | Storage Temperature: –40° to +85°C |
| | Vibration | Operating 9.8 m/s$^2$ (1G), 5 to 500Hz on each axis |
| | Shock | Operating 325G / 2 ms, 160G / 1 ms |
| | Relative Humidity | 5 to 95 per cent, non-condensing |
| **Front Panel** | Interface Connectors | Dual GbE via RJ-45 |
| | | Dual USB via mini USB |
| | | Dual RS-232 via microUSB |
| | LEDs | IPMI management control |
| | | Activity / Link user LEDs |
| | Mechanical | Hot swap ejector handle |
| **Software Support** | Operating System | Linux (consult factory for VxWorks, Windows, or other options) |
| **Conformal Coating** | | Humiseal 1A33 Polyurethane (Optional) |
| | | Humiseal 1B31 Acrylic (Optional) |

| Other | |
|---|---|
| **MTBF** | MIL Hand book 217-F@ TBD hrs |
| **Certifications** | Designed to meet FCC, CE and UL certifications, where applicable |
| **Standards** | VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards |
| **Warranty** | Two (2) years |
| **Trademarks and Disclaimer** | The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice |

# PrAMC based on Intel Xeon E3-1125, Dual 10 GbE – AMC721

## ORDERING OPTIONS

### AMC721 – ABC – D00 – 0HJ

**A = CPU Core, Speed, Cache**
1 = 4C, 2 GHz, 8 MB LLC (Xeon E3-1125)
2 = Reserved
3 = Reserved
4 = Reserved
5 = Reserved
6 = Reserved
7 = 4C, 2.5 GHz, 8 MB LLC (Xeon E3 1125 v2)

**B = DDR3 ECC Memory**
0 = 4 GB
1 = 8 GB
2 = 16 GB

**C = Front Panel Size**
0 = Reserved
1 = Reserved
2 = Mid-size
3 = Full-size

**D = Flash Memory**
0 = None
1 = Reserved
2 = Reserved
3 = 32 GB*
* VadaTech reserves the right to supply larger capacity unless specifically stated otherwise on the Purchase Order

**H = Temperature Range**
0 = Commercial (–5 to +55° C)
1 = Industrial (–20 to +70° C)

**J = Conformal Coating**
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

## COMMON CONFIGURATIONS

AMC721-12x-x00-000     AMC721-72x-x00-000

## RELATED PRODUCTS



**VT841 1U Chassis Platform**

**UTC002 MCH**

**UTC0010 Power Module**

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